



PIANC Bulletin

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Permanent International Association of Navigation Congresses (PIANC)

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President's Message by Major General Don T. Riley, President, PIANC USA, and Director of Civil Works, U.S. Army Corps of Engineers

Dear Members,

While use of our Nation's waterways will grow by as much as 30 percent in tonnage throughput over the next 20 years, the aging U.S. navigation network of structures and channels continues to deteriorate to critical levels of reliability. The American Society of Civil Engineers has rated the Nation's total infrastructure a grade of "D". Much of our navigation infrastructure is passing the 50-year design life, receiving a grade of "D-minus," when 15 years ago, it was a "B".



MG Riley

Unscheduled closures of navigation facilities, due to a backlog of maintenance, rehabilitation, and replacement, is a major concern when entire industry bases that rely on "just in time" delivery are shut down, but this is not the greatest risk we face on our waterways. We must guard against slipping beyond this economic impact to the exposure of mariners to unsafe conditions. History has taught that man-made disasters with loss of life can occur through infrastructure neglect. We also know that our navigation infrastructure must maintain tight security and minimize harm to our country's natural resources.

The visionary leadership that brought the great advances in U.S. transportation infrastructure during the mid 20th century must be at the forefront

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now, through strong partnerships of government and industry, to:

- Develop new policies that are informed with value-laden analyses,
- Advance the state-of-the-practice in risk-informed planning and decision making, and
- Make innovations through research in science, engineering, and construction technologies which increase the values of water projects.

While other nations have dedicated public works governmental organizations to systematically address water projects, the U.S. spreads this responsibility across several agencies, increasing the complexity of actions affecting navigation, or water resources in general. The Corps of Engineers recognizes its leadership responsibility among U.S. government organizations with water-related responsibilities, to develop strategies for justifying safe, reliable, and environmentally sustainable maintenance and expansion of our Nation's waterways system. Resource agencies at each level, public stakeholders, and our partners in the navigation industry all play important roles in the water resources infrastructure development process. The key to success is collaborating to move beyond planning for work on individual channel reaches or lock projects to address the needs of navigation as part of a multi-purpose, basin-scale integrated system.

With a balanced set of outputs for these water projects across multiple purposes, bolstered by strong agency, industry, and stakeholder support, we will be able to demonstrate the value and wisdom of making investment decisions to the Administration and Congress. I look forward to leading us in meeting this challenge into the 21st century.

Sincerely,

Major General Don T. Riley
President, U.S. Section, and Director of Civil
Works, U.S. Army Corps of Engineers

PIANC NEWS

Attendees Welcomed to Smart Rivers 2007 by PIANC USA

Chairman *by John Paul Woodley, Jr.*

On behalf of PIANC USA, it was an honor to welcome attendees to Louisville, Kentucky, for the Smart Rivers 2007 Conference. PIANC USA was extremely pleased and proud to have organized this year's conference. By attending the Smart Rivers 2007 Conference, participants joined the nation's and the world's top professionals in our inland waterway industry.

The 2007 conference was the third in a series of international joint conferences on synergies for an efficient waterway system in Europe and the U.S. Smart Rivers 21 is an international coalition intent on realizing "Strategic Maritime Asset Research and Transformation for 21st Century River Systems" which was started in 2004 by a cooperation agreement between U.S. and European partners, and was followed by the organization of a conference in October 2005 in Pittsburgh. The second conference was held in 2006 in Brussels, organized by the European Federation of Inland Ports (EFIP) in collaboration with TINA Vienna, via Donau, and the Port of Pittsburgh Commission. The previous conferences have highlighted the strategic similarities and differences of the US and European Union (EU) inland waterways systems. The 2007 conference is a continuation of this cooperation and has been organized as a joint effort to benchmark best practices for inland waterways on both sides of the Atlantic, and to help those waterways better integrate themselves into the global supply chain.

Participants took full advantage of all the conference and Louisville have to offer, visiting the exhibit booths, attending the technical sessions and pre-conference workshops, interacting with fellow professionals at the networking events, and exploring Louisville on the technical tours.

A special thanks was extended to local hosts from the U.S. Army Corps of Engineers' Louisville District, and the PIANC USA Commissioners and staff. Thank you to those who attended and I hope your Smart Rivers Conference experience was beneficial and exciting.



Honorable John Paul Woodley, Jr., Assistant Secretary of the Army (Civil Works); and Chairman, PIANC USA.

Smart Rivers 2007 Attendees Welcomed by Corps Division

Commander by Brigadier General Bruce Berwick

It was a pleasure to welcome attendees of Smart Rivers 2007 to Louisville, Kentucky, the home of Kentucky's unbridled spirit. My thanks were extended to PIANC USA for putting that conference together. And I extended a special welcome to PIANC Commissioners and the Corps' Director of Civil Works, MG Riley.

It was my distinct pleasure to address such a diverse group of people from all facets of the navigation industry.

The theme for the conference was "Positioning Inland Navigation as a Powerful Link in the Global Supply Chain" – what an appropriate theme for that group. The role PIANC plays in providing sound economic and environmentally sustainable navigation systems is truly making a difference in solving global complex water resource and infrastructure problems.

As we prepare our global community for a safer tomorrow, we must first understand the

vulnerabilities that we are facing and that those vulnerabilities are diverse.

What we're facing are: (a) natural disasters, (b) aging infrastructure that will fail if not maintained, and (c) the enemies who wish us ill. We must prepare for all of these and more.

In my view, since we cannot control our vulnerabilities, the best way to prepare is to build resiliency into our systems.

When I think about what it means to be resilient, I look at three factors:

- Anticipating events,
- Planning in advance to mitigate risks and lower our exposure, and
- Knowing our capabilities so as to allow us to respond swiftly to quickly restore normalcy.

I discussed the Ohio River Navigation System, and explained what the Corps' Great Lakes and Ohio River Division is doing to build resiliency within our region.

The Importance of the Ohio River Navigation System to the United States

The Ohio River is an important natural resource to the nation, transporting more than 240 million tons of coal, stone, grains, ores, and steel annually.

Coal traffic accounts for 55 percent of all tonnage shipped on the Ohio with 80 percent of that going to waterside electric generating plants. This, in turn, contributes to highly economic electric rates and fuels the regional and international economy.

The Ohio River navigation system also maintains pools that are the source of quality drinking water and recreation opportunities for millions of people who reside in the Ohio River Basin.

Here, the Louisville District operates and maintains eight of the 20 Ohio River projects, with two major construction efforts ongoing:

- McAlpine Locks and Dam Project, which also includes the ongoing McAlpine Lock Replacement Project, and
- Olmsted Locks and Dam, which will replace antiquated Locks and Dams 52 and 53. We are struggling to keep those two locks, long past their service life, in operation.

Maintaining the safety and reliability of the Ohio River system is a top local, regional and national priority.

Reinvestments are needed to keep our locks operating smoothly through the 21st century.

Right now, more than 25 percent of the Ohio River locks are beyond their design life, and in 10 years 50 percent will be.

Building resiliency within the Great Lakes and Ohio River Region

To deal with this challenge of aging infrastructure, over the past 3 years, we have created and adopted a systems approach to risk management.

Consistent with the Corps' Civil Works Strategic Plan, a systems approach is needed to ensure that investments are integrated into a whole that preserves and enhances performance and sustainability at the system level.

This approach is a logical step toward judgments about making informed investments.

A systems based approach also provides the structure for managing entire systems rather than separate elements.

Navigation Program Initiatives

To help us with a systems approach, we have launched several initiatives.

In 2004, we introduced a program titled, "Achieving Navigation Systems Acceptable Levels of Risk."

The purpose was to refocus resources and methodology with the goal of reducing risk to our navigation system. Specifically, we want to minimize unscheduled outages, and ensure we can recover quickly should we experience one.

The program establishes the vision, strategy, goals, and objectives to enable the Navigation systems to meet the regional mission.

We use a collaborative approach which includes navigation industry stakeholders and Corps functional elements. The program is based on establishing clear priorities and making the most important investments first.

The inland navigation program breaks down the Ohio River system into critical components such as lock gates, valves and pumping systems, and activities such as de-waterings and dredging. These are then prioritized based on how they produce the greatest risk to unplanned navigation closures.

Condition assessments were also completed at our projects and used to determine reliability of the various critical components.

Consistent with Asset Management principles, this program made the connection between value that can be preserved as a result of investments made to reduce the risk.

Future enhancements for the navigation risk and reliability based investment program include:

- Obtaining detailed economic impacts of lock outages and light loading,

- Developing channel condition assessment methods,
- Communication products for generating support and engagement, and
- Broader examination of risks which are difficult to quantify.

We have also put in place maintenance standards for our navigation structures which tell us when to take action, and which actions to take...our Operator's Manual.

Concluding Comments

For more than 200 years, the Nation has called upon the Corps of Engineers to solve a variety of civil engineering and resource management problems. Water resources and related challenges are complex and will become even more as the population increases. I would note, there is no national consensus on water resources questions.

As we move closer towards our theme of "Positioning Inland Navigation as a Powerful Link in the Global Supply Chain," we must continue to build stakeholder relationships. Our goal should be to enhance resiliency in all of our systems. Failure is not an option, and it would be a mistake not to work together.

I have often heard Michael Chertoff, Secretary of Homeland Security, say, "The terrorists have to be right only once; we have to be right 100 percent of the time." Given our challenges, that will be difficult at best. Therefore, our highest priority investments must address threats across the spectrum.

The nation is counting on us to get it right.



*Brigadier General
Bruce A. Berwick,
Commander, Great Lakes
and Ohio River Division,
U.S. Army Corps of
Engineers.*

Smart Rivers 2007 Conference was held September 16-19, in Louisville, Kentucky

SmartRivers21, an international coalition intent on realizing "Strategic Maritime Asset Research and Transformation for 21st Century River Systems" was started in 2004 by the signature of a cooperation agreement between American and European partners, and was followed by the organization of Smart Rivers 2005 Conference in October 2005 in Pittsburgh, Pennsylvania. Smart Rivers 2006 Conference was held in Brussels, Belgium, in November 2006.

Sponsoring organizations and exhibitors

Smart Rivers 2007 Conference, with the topic "Positioning Inland Navigation as a Powerful Link in the Global Supply Chain," convened on Sunday, September 16, 2007, at the Seelbach Hilton hotel in Louisville, Kentucky. Sponsored by PIANC USA, organizing committee members came from the U.S. Army Corps of Engineers (USACE); European Federation of Inland Ports; via donau; Appalachian Regional Commission; Institute for Trade and Transportation Studies; Mississippi State University; Port of Pittsburgh Commission; Osprey Lines; Waterway Council, Inc.; MWH Global; Kirby Corporation; American Association of Port Authorities; and Ian White Associates. Approximately 200 participants attended Smart Rivers 2007.

Other cooperating organizations included AustriaTech; ASCE COPRI; Inland Rivers, Ports, and Terminals; National Maritime Enhancement Institute; Marshall University; National Waterways Conference, Inc.; Radio Technical Commission for Maritime Services; TINA Vienna; and the Transportation Research Board/Marine Board.



Seelbach Hilton, Louisville, Kentucky, conference hotel for Smart Rivers 2007.

Sponsoring organizations included the following: (a) Platinum Level (Kirby Corporation); (b) Gold Level (American Commercial Barge Line; Ingram Barge Company); (c) Silver Level (Frequentis Defense, Inc.; Moffatt and Nichol; Port of Pittsburgh Commission) and (d) Bronze Level (INCA Engineers, Inc.; Jeppesen Marine; and MWH Global).



Jeppesen Marine exhibit at Smart Rivers 2007 (photograph by Carol Labashosky, Corps of Engineers, Louisville District).

Exhibitors at Smart Rivers 2007 Conference included American Association of Port Authorities; Frequentis Defense, Inc.; U.S. Coast Guard, Inland River Vessel Movement Center; Jeppesen Marine; PIANC USA; Transas USA; USACE Engineer Research and Development Center; USACE

Huntington District; and USACE Institute for Water Resources.

Pre-conference workshop

A pre-conference workshop discussing “The Future of the U.S. Inland Navigation System: Meeting the Challenges” was held on Sunday afternoon. This stimulating interactive workshop shared ideas and explored the unique challenges facing the 12,000 miles of U.S. waterways. Participants learned the 10 guiding principles for sound design of navigation projects; examined key performance metrics that measure multimodal systems and their impacts on waterway investment and management; explored case studies of North American and European approaches to balancing functional, environmental, and financial interests to create sustainable waterways; and shared ideas on how professional and personal ethics guide organizational behavior in waterway systems.

Historic steamboat tour

A pre-conference historic steamboat tour on the Ohio River aboard the *Belle of Louisville* was conducted on Sunday afternoon. There is nothing like cruising down the river on a Sunday afternoon, especially on an historic paddlewheel steamboat. Attendees enjoyed spectacular views of the Ohio River and the Louisville skyline while listening to historic narration.



Belle of Louisville.

Technical program luncheon speakers

Smart Rivers 2007 Conference technical program was conducted Monday-Tuesday, September 17-18. Monday's luncheon address was delivered by Sean T. Connaughton, Maritime Administrator, who spoke on "Promoting America's Marine Highway." Tuesday's luncheon address was delivered by Major General Don T. Riley, USACE Director of Civil Works, who discussed "Inland Waterways for the 21st Century."



Sean Connaughton, Maritime Administrator, U.S. Maritime Administration.



Major General Don T. Riley, USACE Director of Civil Works, and President of PIANC USA (photograph by Carol Labashosky, Corps of Engineers, Louisville District).

Kentucky Derby Museum gala

Another special event was the Kentucky Derby Museum gala and dinner at Churchill Downs on Tuesday evening, September 18, following the conclusion of the technical program. Guided tours took the attendees through historic Churchill Downs to the back yard paddock for a visit with the resident Thoroughbred, Phantom (grandson of Secretariat, the 1973 Triple Crown winner and considered by many to be the greatest racehorse of all time), and his miniature horse companion, Winston. As the attendees dined, they could feel the excitement of the crowds and hear the thunder of hoofs as they viewed a presentation of Derby

Day in "The Greatest Race," a high-definition film projected on a 360-deg screen.



Smart Rivers 2007 Conference attendees get a guided tour of Churchill Downs and the Kentucky Derby Museum.



Phantom, Churchill Downs' resident Thoroughbred.

Technical tour

A technical tour of McAlpine Locks and Dam, Jeffboat Shipyard, and the Falls of the Ohio was conducted on Wednesday, September 19.

USACE Louisville District provided a tour of McAlpine Locks and Dam, including the ongoing McAlpine lock replacement project. Innovations associated with this project include roller compacted concrete walls, wrap-around filling and emptying system with in-chamber culverts, a shortened guide wall, and reduced cofferdam length.



Dr. Robert Engler, PIANC Environmental Commissioner and Central Region Vice President; Mr. John Paul Woodley, Jr., Chairman of PIANC USA; and others enjoy Smart Rivers 2007 gala dinner at Kentucky Derby Museum.



Inland hopper barge being prepared for launching at Jeffboat Shipyard on the Ohio River, Jeffersonville, Indiana.



Second 1,200-ft lock being constructed at McAlpine Locks and Dam on the Ohio River, Louisville, Kentucky.

The Jeffboat Shipyard properties are America's largest inland shipbuilding and repair facility. The shipyard spans 68 acres of land, and 5,600 ft of frontage on the Ohio River in Jeffersonville, Indiana, across the river from Louisville, Kentucky. Jeffboat manufactures hopper barges, inland tank barges, oceangoing tank barges, and towboats.



Falls of the Ohio State Park and Devonian fossil beds.

Committee, Commissioner, and Working Group meetings

Several different associated meetings were conducted during and following Smart Rivers 2007 Conference.

The USACE Regional Navigation Design Team (RNDT) met on Monday, September 17. The RNDT was formed in January 1994 with the purpose of assuring that innovative design and construction technologies, applicable to the modernization of the nation's navigation system, are adequately and efficiently evaluated in the interest of achieving modernization at the lowest practical cost. The USACE contact is John Clarkson at John.D.Clarkson@usace.army.mil.

The PIANC Commissioners also met on Monday, September 17. The Commission, composed of 11 members, is the central governing body of PIANC USA. The Honorable John Paul Woodley, Jr., Assistant Secretary of the Army (Civil Works) is Chairman of PIANC USA, and Major General Don. T. Riley is President of PIANC USA.

The USACE Inland Navigation Community of Practice (CoP) met on Wednesday, September 19. The Inland Nav CoP is made up of individuals who practice and share an interest in virtually all aspects of navigation. The primary functions of this CoP are to develop and maintain policy and doctrine, a capable workforce, and national and interagency relations and coalitions by accelerating organizational communication and by matching resources and resource requirements. The USACE contact is Mark Hammond at Mark.R.Hammond@usace.army.mil.

PIANC Inland Navigation Commission Working Group 30 (WG30) met on Thursday, September 20. The charge of WG30 is "Inventory of Inspection and Repair Techniques of Navigation Structures (steel, concrete, masonry and timber) Both Underwater and In-the-Dry." The Chairman and U.S. Representative is Robert Willis

(Robert.M.Willis@usace.army.mil), and the U.S. Young Professional Representative is Chad Linna (Chad.A.Linna@usace.army.mil).

PIANC Inland Navigation Commission Working Group 31 (WG31) also met on Thursday, September 21. The charge of WG31 is "Organization and management of River Ports." The Chairman is Yves Morin, Port of Paris. U.S. Representatives include Deidre McGowan, Inland Rivers, Ports, and Terminals, Inc.; and James McCarville, Port of Pittsburgh Commission.

PIANC Inland Navigation Commission Working Group 32 (WG32) also met on Thursday, September 21. The charge of this working group "Performance Indicators for Inland Waterways Transport." The Chairman is Dr. Reinhard Pfiogl, AustriaTech, and the U.S. Representative is William Harder (William.T.Harder@usace.army.mil).

The PIANC Inland Commissioners met Friday, September 21. The Chairman of the Commission is Ian White, Ian White Associates. U.S. Representatives include John D. Clarkson, USACE; and William R. Coles, Hanson Professional Services.

Smart Rivers Technical Program, September 17-18, 2007 *

Session 1: Opening Session, Moderator Gary LaGrange, Port of New Orleans, Louisiana.

- **Welcome to Louisville**, Brigadier General Bruce A. Berwick, US Army Corps of Engineers, Great Lakes and Ohio River Division, Cincinnati, Ohio
- **Lessons from Smart Rivers 2006**, Arno Hart, RNO Group
- **Where are "Smartrivers" going? European Perspective**, Michael Fastenbauer, via donau

Session 2: Changing Markets--What Drives Cargo on the System? Moderator Doris Bautch, U.S. Maritime Administration, Schaumburg, Illinois.

- **European IWT Success Stories--Past and Future**, Joerg Rusche, European Barge Union
- **Future of Inland Navigation**, Mark Carr, MEMCO Barge Line, Inc.
- **Navigation Economic Technologies (NETS)**, Wes Wilson, University of Oregon
- **Developing Container-on-Barge Business in the U.S.**, Christian O'Neil, Osprey Lines

Session 3: Promoting a Sustainable Inland Navigation System--Systems Perspectives, Moderator Anne Sudar Cann, U.S. Army Corps of Engineers, Institute for Water Resources, Alexandria, Virginia.

- **The Environmental Perspective of the Rhine**, Moderator Margriet Schoor, Rijkswaterstaat
- **Status of Inland Water Assessment in the U.S.**, William Harder, U.S. Army Corps of Engineers, Great Lakes and Ohio River Division
- **Container Development in Constanta/Danube Waterway**, Gerhard Gussmagg, via donau
- **Barge Operations on the Columbia-Snake River**, Ken O'Hollaren, Port of Longview, Washington

Session 4: Policy Comparisons and Project Determinations--How Are Local Projects Done? Moderator Dan Mecklenborg, Ingram Barge Company, Nashville, Tennessee.

- **Ohio River Mainstem Study**, Mark Hammond, U.S. Army Corps of Engineers, Huntington District
- **Externalities and Project Approval**, Larry Bray, University of Tennessee Transportation Center
- **Finnish Waterway System**, Olli Holm, The Finnish Maritime Administration

- **Waterways and Economic Development Organizations**, Scott Hercik, Appalachian Regional Commission

Session 5: Reliability and System Use, Moderator Helen Brohl, U.S. Committee on the Maritime Transportation System, Washington, DC.

- **e-Maritime and River Information Services**, Lea Kutters, Rijkswaterstaat, Transport Research Center
- **USACE Approach to Information Technology**, James Walker, U.S. Army Corps of Engineers, Headquarters, Washington DC
- **River Information Services in Europe**, Juergen Troegl, via donau
- **Kiel Canal System**, Robert Pfister, Frequentis Defense Inc.

Session 6: PIANC Activities--Port Management in Europe, Moderator James McCarville, Port of Pittsburgh Commission, Pittsburgh, Pennsylvania.

- **Organization and Management of River Ports**, Yves Marin, Port of Paris
- **Port of Paris Profile**, Chloe Perreau, Port of Paris
- **Inland Navigation Commission (InCom) Overview**, Ian White, Ian White Associates
- **Performance Indicators for Inland Waterways Transport**, Reinhard Pfliegl, AustriaTech

Session 7: Future Challenges to Industry, Moderator Larry Brown, Mississippi Department of Transportation, Jackson, Mississippi.

- **Software Tools for Lock Planning**, Pascal Verlinden, TINC Associates
- **Transforming a Barge Company into a Transportation Company**, Michael Ryan, American Commercial Lines

- **Future Research on Inland Navigation--A European Perspective**, Michael Fastenbauer via donau
- **The Role of Deepsea Ports to Inland Ports**, Don McCrory, Port of Memphis

Session 8: Town Hall Meeting, Moderator Bruce Lambert, Institute for Trade and Transportation Studies

- **Report from Session Moderators: Next Steps Going Forward**

* All technical presentations are located at: http://www.iwr.usace.army.mil/newpianc/proceedings_07..htm

Assistant Secretary of the Army Recognizes Wakeman and Pyne

The Honorable John Paul Woodley, Jr., Assistant Secretary of the Army (Civil Works), and Chairman, PIANC USA, presented medals of recognition to two PIANC USA Commissioners, whose terms are ending in December. The presentations took place at the Smart Rivers 2007 Conference in Louisville, Kentucky, September 18-19.

During the luncheon on September 18, Dr. Thomas Wakeman, who has served as a Commissioner and Vice President of the Eastern Region since 1999, was acknowledged. Dr. Wakeman is the Deputy Director of the Center for Maritime Systems Research and professor of Civil, Environmental, and Ocean Engineering at the Stevens Institute of Technology, Hoboken, New Jersey. Until earlier this year, he also served as Vice President of the PIANC International Executive Committee. Tom has been an important part of the U.S. Commission for the last 8 years, and his presence will be missed. Mr. Woodley thanked him for his leadership and exceptional service to PIANC, and presented him with a PIANC silver medallion.



The Honorable John Paul Woodley, Jr. (left), Assistant Secretary of the Army (Civil Works), and Chairman, PIANC USA, presenting a medal of recognition to Dr. Thomas Wakeman (right), PIANC USA Commissioner (photograph by Carol Labashosky, Corps of Engineers, Louisville District).

During the Commissioners meeting on September 19, Mr. Joseph Pyne was also recognized for his service to PIANC. Mr. Pyne has served on the U.S. Commission since 1999, and is currently President and CEO of Kirby Corporation where he has been since 1995. He has been an active member of PIANC for many years and he has contributed greatly to the U.S. Commission. His knowledge and experience will be missed. Mr. Woodley thanked him for his guidance and exceptional support of PIANC, and presented him with a PIANC silver medallion.



Joseph Pyne, President and CEO, Kirby Corporation.



PIANC USA ANNOUNCES A CONFERENCE ON

Gulf Coast Hurricane Preparedness, Response, Recovery and Rebuilding *A regional conference with international application*



Where: Mobile, Alabama

When: Early November 2008

Who Attends: Anyone with an interest in post storm ecosystem restoration and coastal infrastructure protection

Invited presentations and call for papers

Topics

- Long Term Economic and Environmental Recovery
- Emergency Preparedness
- Watershed wide flood hazard master planning
- Self Sustaining Ports
- Navigation
- Regional Sediment Management
- Ecosystem Resiliency
- Community Resiliency
- Beneficial Uses of Dredged Material
- Flood and Storm Damage Reduction
- Engineering and Environmental Challenges
- Technological Advances

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Much Discussion on the “Future of the U.S. Inland Navigation System” at Workshop

by William McAnally,
Mississippi State University

Recent workshop participants engaged in a lively, sometimes heated, discussion of how to meet the challenges of the inland waterway system during the PIANC Smart Rivers 2007 Conference in Louisville. The Workshop, entitled “The Future of the U.S. Inland Navigation System Workshop – Meeting the Challenges,” was held on September 16, 2007.

Presentations on “River Commerce in North America and Europe: Meeting the Increasing Demand for Cereals in Developing Countries,” “The Declining Reliability of the U.S. Inland Waterway System,” and “Navigation and Ecosystem Sustainability Program (NESP) – A Case Study of the Upper Mississippi River System” established a framework for interactive sessions on principles for Sound Navigation Systems, Metrics for Measuring System Performance, and Ethics for Decision-making, generating a lot of discussion and ideas for individual and organizational follow-up.

Thirty people attended the workshop, which was organized by Nicholas Pansic, Vice President of MWH Natural Resources, Industry, and Infrastructure; and Kelly Barnes, U.S. Army Corps of Engineers (USACE), Institute for Water Resources. Other workshop leaders included Dennis Wichelns, Hanover College; David Grier, USACE; Charles Spitzack, USACE; and William McAnally, Mississippi State University. The workshop content was based in part on a draft manual, *Navigation Engineering Practice and Ethical Standards*, soon to be published by the American Society of Civil Engineers.

Workshop participants received a binder with handouts and a reference list, and will be getting a follow-up document listing major discussion points that arose in the interactive portions. Participants also earned 4 Professional Development Hours,

including 1 hour of ethics training. For more information on this workshop, please contact Kelly Barnes at kelly.j.barnes@usace.army.mil or go to the PIANC USA website www.pianc.us.



Workshop Instructors (left to right): Dr. William McAnally, Mississippi State University; Dr. Dennis Wichelns, Hanover University, Indiana; David Grier, U.S. Army Corps of Engineers, Institute for Water Resources; Charles Spitzack, U.S. Army Corps of Engineers, Rock Island District; and Nick Pansic, MWH, and Chair, ASCE/COPRI Waterways Committee (photograph by Michael Cox).

PIANC Inland Navigation Commission (InCom)

by Ian White

The PIANC Inland Navigation Commission (InCom) deals with all matters related to inland navigation. It networks with other national organizations on an international basis. InCom is concerned with the development of waterways as part of a multi-modal transport system. It also plays a major role in understanding the impact of the European Union’s Water Framework Directive on inland navigation. It has played a significant role in the development of the European River Information System (RIS). InCom has created a seamless network of working groups for sharing experiences.

The members of InCom come from 12 different countries, including Mr. Ian White (Chairperson, UK), Mr. Paul Pierron (Secretary, France),

Dr. Reinhard Pfliegl (Austria), Mr. Philippe Rigo (Belgium), Mr. Flavio D'Agnola (Canada), Mr. Risto Lang (Finland), Mr. Yves Morin (France), Mr. Michael Behrendt (Germany), Mr. Luca Crose (Italy), Mr. Pieter van Ginnenken (The Netherlands), Mr. Francisco Lefler (Spain), Mr. Kjell Jacobsson (Sweden), Mr. John Clarkson (U.S.), and Mr. Jean Woehrling (Rhine Commission). There are at present six Working Groups (WG) in InCom.

WG27: Guidelines to Reduce Environmental Impacts of Vessels

The need to address environmental issues regarding impacts from vessels has become a necessity in evaluating, designing and operating our waterways. To minimize potential impacts, enhance environmental opportunities and provide an environmentally sustainable waterway system, we must be able to identify, quantify, and predict vessel effects and their potential ecological impacts. Currently, there are many issues both on our inland system and in our ports regarding impacts of vessel-generated waves, drawdown, shear stresses and propeller scour. The physical forces produced by each vessel along with projected increases in traffic volume can produce unacceptable ecological impacts.

There is currently guidance in several PIANC publications regarding quantifying propeller jet velocities and ship waves; however, due to the more recent focus of studies to assess ecological impacts of vessel traffic, guidance should be expanded to include state-of-the-art methods for describing, quantifying and managing physical effects produced by vessels. This working group should consider and collaborate with ongoing working group efforts on sustainable rivers and recreation navigation and nature.

The objective of WG27 is to collect, evaluate, and develop a set of guidelines on methodologies available for quantifying physical effects at temporal and spatial scales pertinent to ecological endpoints, and to recommend management

guidelines. WG27 will be led by InCom, and conducted jointly with MarCom, RecCom, and EnviCom.

WG27 U.S. Representative is Thomas Keevin, Corps of Engineers, St. Louis District, Thomas.M.Keevin@usace.army.mil.

WG28: Developments in Automation and Remote Control of River Works

Many different countries have put into practice several degrees of automation and remote control for river and canal operation such as automation of groups of locks on less busy canals. This has been done in France on several waterways using various techniques (electronic control from the vessels, simple mechanical control, etc.). Automation or remote control of dams on rivers has been established, as well as remote control of individual locks on big and busy canals or rivers. Several experiences are known, but generally the work-station is not far from the locks. True automatic ship lock management involves using a procedure to define the position of the ships in the locks in order to maximize the number of ships in the chamber.

There are now some automatic packages that can be used to regulate ships in locks (instead of the previous 'first arrive - first in'). Such packages could use a RIS database to know the ship sizes, estimated time of arrival, etc.

The objective of WG28 is to organize an exchange of international experience and learning about automation of river works (dams, locks, mobile bridges, etc.), and the remote control of these facilities.

WG28 U.S. Representative is James McCarville, Port of Pittsburgh, jim@port.pittsburgh.pa.us.

WG29: Innovations in Navigation Lock Design

The objective of WG29 is to establish a comprehensive state-of-the-art review of modern technologies and findings of recent research used to design and build navigation locks since the last PIANC WG29 report was published in 1986. Recent projects should be reviewed and analyzed. Guidelines for studies at the design stage will be established. Maintenance and operational requirements will also be discussed. The goal of WG29 is not to condense all the available data within a single report, but to provide a comprehensive list of all the available references. These references must be analyzed, compared, and criticized by WG29 to give engineers, designers, and authorities a reference guide to access relevant information to solve their problems.

Only new concepts and technologies not discussed in the PIANC 1986 report will be considered. For instance, domains where advances have occurred since 1986 include: (a) analytical methods of numerical modeling for structural, hydrodynamic, and thermal analyses, (b) composite materials, (c) environmentally-friendly lubricants, (d) float-in construction, (e) in-the-wet construction (e.g., lift-in pre-cast concrete components), (f) improved barge impact models, and (g) innovation in approach design.

Particular attention will be given to studies that must be achieved at the design stage (civil engineering, electro-mechanic, hydraulic, water management, safety and risk, economy, and control). For each aspect, the actual state-of-the-art will be presented with emphasis on the analytical methods of numerical modeling versus traditional physical modeling. This is an area that has changed significantly since 1986.

WG29 U.S. Representatives are John Clarkson, Corps of Engineers, Huntington District, John.D.Clarkson@usace.army.mil, and Dale Miller, Inca Engineers, d.miller@incainc.com.

WG30: Inventory of Inspection and Repair Techniques of Navigation Structures

A large percentage of lock, dam, and flood control projects are reaching the end of their design lives. Funds to repair or replace existing infrastructure projects are typically scarce. As a result, cost effective maintenance and repair of these projects is vital to the commerce and welfare of the industries and populations that these systems support. The objective of this working group is to compile methods, materials, and procedures that are used to extend, preserve, or maintain the operational viability of these inland projects.

The following elements of work provide a representative list of topics for WG30 to evaluate for their inclusion in the bulletin. These elements of work include:

- Systems and techniques, both simple and detailed, to monitor and evaluate condition of underwater structures, and assessment of systems that may be used for in-situ repair and replacement.
- Evaluation of methods or systems used to prevent damage due to debris, storms, or vessel impact with river structures, repair in the event damage occurs.
- Evaluate the use of coatings, anodes and impressed currents, or other methods that may be in use for corrosion protection.
- Condition assessment of concrete and steel structures, and repair techniques used both under water and in-the-dry.

The method of approach will be to utilize resources of WG30 members to compile information on the matters listed above. These will be prioritized into methodologies and techniques in current use, and rated for their efficacy and prevalence. WG30 will also evaluate why some methods are no longer in use, and what techniques or methods are used instead.

WG30 U.S. Representatives are Robert Willis, Corps of Engineers, Great Lakes and Ohio River Division, Robert.M.Willis@usace.army.mil, and Chad Linna, Corps of Engineers, Great Lakes and Ohio River Division, Chad.A.Linna@usace.army.mil.

WG31: Organization and Management of River Ports

Ports play a key role in the development of river transport. As a result of several historical, geographical, or cultural reasons, the expression ‘port’ covers a whole range of different meanings, depending on who uses it and where it is located. A port can be anything from a simple transfer dock integrated within a factory, to a hub serving local and industrial customers located at a considerable distance from the waterway. The port facility may be managed by a traditional public authority, or can be a complex arrangement of publicly or privately owned companies that manage some or all activities related to the river, the site and wharf area, the buildings, dock handling, storage, road, rail, river transport, etc.

Port authorities in different countries, and regions of countries, continue to search for the most effective organization and ways to best change the operations of the various parties involved in the management of the port. WG31 will establish the background information for a follow-on working group on “Planning and Development of River Ports.”

The objective of WG31 is to analyze the roles and missions at river ports around the world between public and private partners. WG31 will collate the different practices and inform PIANC members about current state-of-the-practice in the organization of port systems. Lessons learned from this collective data will provide practical information on evaluating effective port development related to river transport. It will, for example, give references for port authorities concerned about their own involvement in safety on the river, ownership of logistic areas, etc. It will

also be useful for private companies that are looking for new fields of development in the port area.

WG31 U.S. Representatives are Deidre McGowan, Inland Rivers Ports and Terminals, Inc., and Jim McCarville, Port of Pittsburgh, jim@port.pittsburgh.pa.us.

WG32: Performance Indicators for Inland Waterway Transport

Performance indicators are quantifiable measurements that reflect the critical success factors of an organization (or mode of transport). ***What gets measured gets done.*** Performance measurement can help organizations to improve performance by identifying good practice, and learning from others. Within the logistic sector, examples of Key Performance Indicators and Best Practices can be found mainly in the air cargo business, where common industry Service Performance Indicators have been defined. The European Short Sea sector is well on the way to developing quality criteria to measure the performance of so called “Motorways of the Sea,” high-quality maritime services between seaports. The development of appropriate service performance indicators for inland waterways will help tie together condition assessment and required levels of service with prioritization of routine maintenance, major rehabilitation, and recapitalization strategies.

The objective of WG32 is to set common definitions, standards, and measurements to encourage industry-wide adoption of harmonized performance indicators and best practices to improve performance within the inland navigation industry. WG32 seeks to gather input from the entire logistics chain to define what are important expectations, and metrics for performance, on inland waterway systems.

WG32 U.S. Representative is William Harder, Corps of Engineers, Great Lakes and Ohio River Division, William.T.Harder@usace.army.mil.

Sandra Knight recognized with appreciation

It was indeed a pleasure for me to extend, on behalf of InCom, our sincere gratitude and appreciation to Sandra Knight for having served so diligently and with such foresight as the previous Chairwoman of InCom. Under her guidance to the InCom working groups, great accomplishments were achieved, and the state-of-the-art of inland navigation was significantly advanced. We wish her well in her new career as Director of Policy and Planning for the U.S. National Oceanic and Atmospheric Administration.



Present InCom Chairman Ian White presents a gift of appreciation to Sandra Knight, previous Chairwoman of InCom, for her many years of dedicated service to InCom and PIANC (photograph by Carol Labashosky, Corps of Engineers, Louisville District).

Working Group members needed

Several new working groups are presently being formed to work on different aspects of great interest to inland navigation. Volunteer engineers and scientists are needed to fill positions on these new working groups, as well as vacancies that

continuously arise on existing working groups. If you are interested in serving on a PIANC InCom working group, contact Ian White at ian555white@btinternet.com.



*Ian White (UK),
Chairman, PIANC Inland
Navigation Commission
(InCom).*

RecCom Working Group 15 (WG15) Update: The Use of Alternative Materials in Marine Construction**Scope of work**

Growing concern about the environment has lead to a need to design, construct, and protect waterfront facilities in alternative ways compared to traditional marine construction materials. Alternative materials such as recycled plastics, fiber composites, and other propriety emerging materials are gradually gaining acceptance in marine construction.

The Recreational Navigation Commission (RecCom), Working Group 15 (WG15) is developing a report to: (a) make an inventory of purported alternative materials, (b) investigate these materials from a technical, economical, and environmental point of view, (c) collect and describe relevant case study examples; and (d) report on consequences and draft recommendations.

Since this topic is relevant to many other PIANC committees, RecCom WG15 intends to involve Inland Navigation Commission (InCom), International Co-operation Commission (CoCom), Maritime Navigation Commission (MarCom),

Promotion Commission (ProCom), and Environmental Commission (EnviCom) in this effort.

Meeting location

The chairperson (Terry Browne, USA) recently met individually with several of the members of the U.S. Subcommittee, as well as having attended one international committee meeting. On July 1, 2007, in conjunction with the Coastal Structures Conference 2007 in Venice, Italy, RecCom WG15 met to discuss finalizing the document for publication. WG15 Chairperson Terry Browne and Elio Ciralli (Italy) made significant progress on the publication before the international RecCom meeting 20 October 2007 in Brussels.

Status of effort

The draft report was available in early October 2007 for review at the international RecCom Meeting in Brussels.

Tour

The RecCom WG15 committee deals with non-traditional materials. The water taxi docks in Venice, Italy, are constructed of thermoplastic fenders, and were ideally suited as an alternative material candidate for evaluation by WG15.

InCom Working Group 30 (WG30) Update: Inventory of Inspection and Repair Techniques of Navigation Structures (Steel, Concrete, Masonry, and Timber) both Underwater and In-the-Dry

Scope of work

The work of PIANC Inland Navigation Commission (InCom) Working Group 30 (WG30) consists of collecting and compiling information from a variety of agencies and operators throughout

PIANC member nations on the methods, tools, materials, and equipment that are used in the preservation and maintenance of navigation structures.

Meeting location

The most recent meeting of WG30 was held in Louisville, Kentucky, in conjunction with Smart Rivers 2007 Convention, on September 20, 2007.

Attendees

The meeting was attended by nine members from the USA, Belgium, Japan, France, and Germany.



WG30 members in attendance at the 20 September 20, meeting in Louisville, Kentucky are (left to right) Hans Joachim Uhlendorf (Germany), Peter Van Besien (Belgium), Eric Van Draege (Belgium), Astrid Laemont (Belgium), Robert Willis (USA), Chad Linna (USA), Brahim Benaissa (France), Ron Heffron (USA), and Hiroshi Yokota (Japan).

Status of the effort

WG30 is in the midst of collecting pertinent inspection and repair information from as many countries as possible. An initial draft of the final report was reviewed, and it was determined that additional information is needed on innovative methods used throughout the world.

Tour

WG30 members toured McAlpine Locks and Dam to see construction of the new 1,200-ft-long lock chamber, as well as Jeffboat's shipyard construction facility, and the Falls of the Ohio Museum and Devonian fossil beds.

**MarCom Working Group 55
(WG55) Update: Safety Aspects of
Berthing Operations of Oil and Gas
Tankers****Meeting location**

The first meeting of MarCom WG55 was held in July 2007 in Brussels, Belgium. The next meeting is scheduled for Madrid Spain, October 16 and 17, 2007; with future meetings planned for the London or Wallingford, UK, February 2008; New York, USA, May 2008; and Bergen, Norway, September 2008.

Attendees

The meeting was attended by 14 representatives from several nations, including Carl August Thoresen (PORT-CAT, Norway), Svein Ove Nyvoll (Olav Olslen a.s., Norway), Jose Llorca (Pueblo del Estado, Spain), Sergi Ametller (Sistemas SA, Spain), Frederic J. L. Hannon (Cheniere, USA), Steve Barber (Shell Shipping Technology, UK), Lawrence K. Cunningham (Halcrow HPA, USA), Larry A. Wise (Moffatt and Nichol, USA), Friedrich Vogel (Wilhelmshavener, Germany), Jean Persy (Port of Antwerpen, Belgium), Andy Dogherty (International Marine Transportation, UK), Mark McBride (HR Wallingford, UK), Willem Hoebee (Port of Rotterdam, The Netherlands), and Arnold Jacobsen (PIANC representative, Norway).

Status of the effort

The initial terms and scope of MarCom WG55 were discussed in detail, and a great deal of

information was exchanged between participants. The group will produce a final report as soon as possible. The title of the report will be "Guidelines for Safety Aspects Affecting the Berthing Operations of Tankers to Oil and Gas Terminals." The report will include: (a) definitions and terms of reference, (b) general background and definition of the problem based on PIANC MarCom instructions, (c) various countries and port regulations, (d) environmental conditions, (e) approaches from the open sea to the terminal, (f) maximum acceptable wind speed to be adopted for safe berthing of tankers, (g) mooring and monitoring systems for oil and gas terminals, (h) safe distances between two moored oil and/or gas tankers, (i) number of tugboats to be used during the berthing operation, (j) operational safety during berthing and unberthing, (k) recommended standards or recommendations for calculating wind and current forces, and (l) case studies.

**2008 Jack Nichol Marina Design
Award: Call for Applications**

The Recreation Navigation Commission of the International Navigation Association (PIANC) invites marina designers and owners to submit applications for the "2008 Jack Nichol Marina Design Award" for outstanding marina design, before December 1, 2007.

The Jack Nichol Award was established in memory of the late John M. 'Jack' Nichol, honorary member of PIANC and well known marina designer.

The Award consists of a bronze plaque suitable for display.

The purpose of the Award is to recognize excellence in the design of modern recreational boating facilities around the world. Marina owners and designers may submit an application to be considered for the Jack Nichol Award.

The Jack Nichol Award will be made annually, when a sufficient number of applications are received. The Recreational Navigation Commission will judge the applications. The winner will be announced at the Annual General Assembly of PIANC in May 2008 by the Chairman of the Recreational Navigation Commission and following be published in the Bulletin and on the website of PIANC.

The submittal requirements and award criteria are downloadable from
<http://www.pianc-aipcn.org/pianc/awards.php>

Applications should be sent to
Dr. Eng. Elio Ciralli
Secretary of the PIANC-AIPCN Recreational
Navigation Commission
Viale delle Magnolie, 36
90144 – Palermo, Italy
E-mail: elio.ciralli@cirallistudio.com

Young Professionals Corner

Definition of a PIANC Young Professional

Any PIANC member (individual or corporate) who is under 40 years of age.

Position vacancies

The Young Professional Group (USYP) of PIANC USA is seeking Young Professional members of PIANC USA to fill the following positions:

- One Alternate Representative for YPCOM
- Two East Regional Representatives
- One Central Regional Representative
- One West Regional Representative
- Corporate Representatives

For lists of PIANC USA Regions and Corporate Members, visit the “About Us” page of the PIANC website
(<http://www.iwr.usace.army.mil/newpianc/aboutUs.htm>). If you are interested, please contact Jessica

McIntyre, Moffatt & Nichol at
jmcintyre@moffattnichol.com for more information.

Young Professionals Commission (YPCOM)

With the addition of three new member countries (India, Portugal, and Serbia), the members of the Young Professionals Commission (YPCOM) represent 14 member countries (Austria, Belgium, France, Germany, India, Italy, Japan, Portugal, Serbia, South Africa, Spain, The Netherlands, United Kingdom, and USA). The 3rd meeting of the Young Professionals Commission (YPCOM) was held August 31, 2007, in Vienna, Austria, with representatives from Austria, Belgium, France, Germany, India, Italy, Portugal, Spain, The Netherlands, and United Kingdom in attendance. Visit the Young Professionals page of PIANC’s website (<http://www.pianc-aipcn.org/pianc/yp-index.php>) for more information on the activities of YPCOM.

PIANC Young Professional Technical Visit: Venice Locks, July 5-6, 2007

PIANC Italy organized the first technical visit of the Young Professionals Commission to the Modulo Sperimentale Elettromeccanico (MO.S.E.) project, and Experimental Centre for Hydraulic Models, with the support of the Venice Water Authority. The technical visit was held July 5-6, 2007, with 12 YPs in attendance from Germany, France, The Netherlands, and Italy. The aim of the MO.S.E. project is to defend Venice against “high waters” using a system of maneuverable barriers at the lagoon inlets. An introductory talk and a video were followed by a boat tour to the inlets of Malamocco and the Lido, where the works are under construction. At the Experimental Centre for Tests on Hydraulic Models at Voltabarozzo, participants enjoyed a brief presentation of the laboratory’s activities and a tour of the facility including some model tests of the MO.S.E. project, such as the operation and control performances on a full size gate (the Electromechanical Experimental Module).

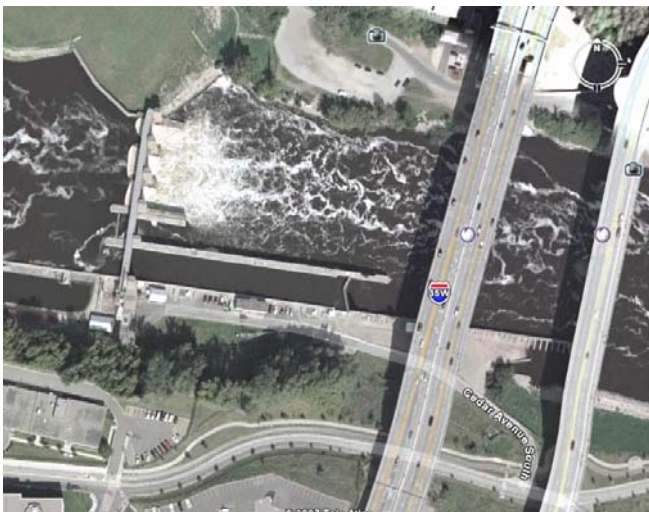
Visit the Young Professionals section of the PIANC USA website

(http://www.iwr.usace.army.mil/newpianc/young_professionals.htm) for opportunities available to YPs in PIANC USA.

INDUSTRY NEWS

Corps' St. Paul District Responds to I-35W Tragedy and Mississippi River Closure *by Shannon Bauer*

U.S. Army Corps of Engineer's Lower St. Anthony Falls Lock and Dam employees in Minneapolis found themselves at ground zero for a large-scale disaster response effort that began Wednesday, August 1, 2007, after parts of the I-35W Bridge over the Mississippi River fell on their work site around 6 p.m.



I-35W bridge over the Mississippi River in Minneapolis, Minnesota, prior to collapse. Note Lower St. Anthony Falls Lock and Dam to the immediate left side of the bridge.

Debris from the 8-lane, 500-ft span bridge fell on the lock's lower guidewall and adjacent property. From the night of the collapse and throughout most of the following month, the Army's lock and dam became a nerve center for emergency operations.



I-35W bridge after collapse, showing downstream end of Lock and Dam lower guide wall at bottom of photograph (photograph by White House photographer).

Lock operators Jim Crosby and David Nerva were working on the Lower St. Anthony Falls lock wall, about 60 ft from the bridge, when it collapsed. Crosby said he had not been looking at it, but he saw a poof of smoke out of the corner of his eye. He looked up just in time to see the bridge fall down. "I just couldn't believe what I was seeing," he said.



Another view of the downstream side of Lower St. Anthony Falls Lock and Dam, taken from the 10th Avenue Bridge. This photograph is possible only because of the collapse of the I-35W bridge, which would normally block the view of the Lock and Dam from the 10th Avenue Bridge. Note the view of the Stone Arch Bridge and the 3rd Avenue Bridge in the background.

Nerva heard a noise and also looked up just in time to witness the collapse. He ran to get the Corps' emergency lifeboat into the water via crane (normal procedure to operate the lifeboat), while Crosby ran inside the lock house to open the site's security gates and allow rescue workers access. Then, both he and Nerva assisted with the immediate incident response.

After a few hours, when it was believed that all the survivors had been rescued, efforts turned to search and recovery. The staff at both the Lower St. Anthony Falls Lock and Dam and its headquarters, the St. Paul District, pledged to assist the incident commander (Hennepin County Sheriff) in any way they could. This help included providing a site for recovery crews to work at, as well as equipment and people.

The sheriff's department located its command post, which included two mobile command vehicles and a storage trailer, on the site. Additionally, a U.S. Navy dive team called in to assist with finding the victims moved into the basement of the main lock house.

The St. Paul District's maintenance and repair unit, which is based in Fountain City, Wisconsin, just happened to be at the lock and dam that week completing routine maintenance work with a crane barge and handflat. This crew and heavy equipment remained in Minneapolis to support the efforts of the Hennepin County Sheriff's office and then the Navy dive teams.

Greg Frankosky, St. Paul District's Physical Support chief, said the crew loaded and unloaded the Navy team's five semi loads of equipment, set up barge dive platforms, and lifted vehicles out of the water that contained victims. They also removed other vehicles, concrete, and truss steel that were blocking in the occupied vehicles.



Corps of Engineers St. Paul District's maintenance and repair unit (photograph by Jon Lyman, St. Paul District).

Throughout the search and recovery efforts, the district's water control and lock personnel adjusted water levels on the Upper Mississippi River to aid the divers. "Since the region had been suffering from a drought at the time of the incident, this was relatively easy up until the weekend of August 18, when the area was pummeled with severe storms," said Scott Bratten, the individual who controls the Mississippi River water levels in this area.

"To compensate for the rains, we drew the pool down for storage purposes and passed larger volumes of flow later at night," Bratten said. "When the divers were ready to work in the early morning hours, we were able to keep flows to a minimum and allow the recovery effort to continue."

"The divers could handle the depth," he explained, "but not the fast currents."

It took until August 20, to locate the eight known victims. (A total of 13 died. The others were recovered on top of the bridge.) By August 22, the Navy and Hennepin County personnel pulled out most of their assets from the area, although the sheriff continued to provide security around the site until most of the debris was removed.

The Minneapolis Department of Transportation was responsible for removing the debris and building a new bridge. Members of the District's engineering staff and a Corps' debris removal expert provided the agency with technical assistance at their request.

President George W. Bush recognized Crosby and Nerva, the two Corps' employees working the night the bridge fell, and other immediate responders for their efforts at the Lower St. Anthony Falls Lock and Dam in Minneapolis Saturday, August 4.

The U.S. Coast Guard (USCG) closed the navigation channel between Upper St. Anthony Falls Lock and Dam and Lock and Dam 1 in Minneapolis August 1. (Upper St. Anthony Falls is located around one-half mile upstream of Lower St. Anthony Falls Lock and Dam and the debris pile, and Lock and Dam 1 is located about 5 miles downstream.) It opened the channel to limited local commercial traffic September 7.

The barge operators had to coordinate their movement with the USCG Sector Upper Mississippi River command center in St. Louis since the National Transportation Safety Board was conducting an investigation into the bridge collapse. No recreational boats were allowed into the area.



President George W. Bush with Lower St. Anthony Falls Lock and Dam operators Jim Crosby and David Nerva (photograph by White House photographer).

Tour boats located upstream of the Upper St. Anthony Falls Lock and Dam were allowed to lock down-bound through Upper St. Anthony Falls into the intermediate pool. The tour boats were not allowed to lock through the Lower St. Anthony Falls Lock and Dam or transit the bridge collapse area.

The tour boats were allowed to lock down-bound through Upper St. Anthony Falls Monday through Saturday between 7 p.m. to 7 a.m. The tour boats were allowed to also lock through Upper St. Anthony Falls all day on Sunday during non-work hours of the bridge demolition contractor.

On October 6, the Corps opened its upper three locks and dams in Minneapolis (Upper St. Anthony Falls Lock and Dam, Lower St. Anthony Falls Lock and Dam, and Lock and Dam 1).

USCG removed the security zone from Mile 851.7 to Mile 854 on the Upper Mississippi River, and all vessels, including recreational vessels, are now allowed to proceed through this entire area.

This is the first time the Minneapolis Locks and dams have been open to all navigation traffic, including recreational vessels, since the collapse of the I-35W bridge on August 1.

The Corps completed hydrographic surveys of the river's navigation channel during the week of October 1, to ensure all bridge debris had been removed prior to opening the locks and dams.



Shannon L. Bauer is the Deputy Chief of Public Affairs, U.S. Army Corps of Engineers, St. Paul District. Prior to starting at the Corps of Engineers in 2002, she worked as a community newspaper editor and reporter.

Barge Navigation on the Columbia and Snake River System from Portland, Oregon, to Lewiston, Idaho

At the Smart Rivers 2007 Conference, Mr. Kenneth B. O'Hollaren, Executive Director of the Port of Longview, Washington, described barge navigation on the Columbia and Snake River (CSR) system. The CSR system provides a transportation corridor that moves about 40 million tons of cargo at a value of about \$16 billion annually.

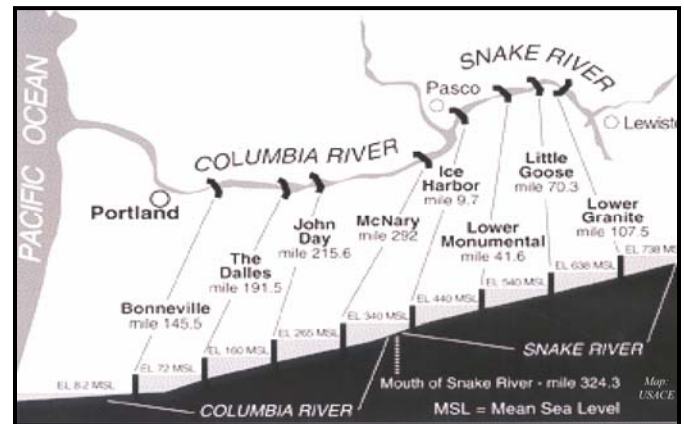


*Kenneth O'Hollaren,
Executive Director, Port of
Longview, Washington.*

The Columbia River drains about 260,000 square miles of area that includes portions of seven states. Because of the 40-ft-deep channel for the lower 105 miles of river (between Portland, Oregon, and the Pacific Ocean) and slackwater lakes on the middle river, ocean freighters can navigate up the Columbia to Portland, Oregon, and barges can transport goods to and from the interior. Towboats push barges through four navigation locks on the Columbia River (Bonneville, The Dalles, John Day, and McNary), and four navigation locks on the Snake River (Ice Harbor, Lower Monumental, Little Goose, and Lower Granite) to Lewiston, Idaho. There is a 14-ft draft for the 360 miles from Portland to Lewiston.

Every year, the CSR system handles 10-12 million tons of barged cargo along the 465-mile-long waterway. The barges carry diesel fuel and other commodities upriver, and grain, wood chips, agricultural products, and lumber downriver. About 80 percent of Pacific Northwest wheat production moves through the system for export from Portland. There are 36 ports along the Columbia and Snake River system. Major cargos for transport by barges

are: (a) grain, (b) containers on barge, (c) petroleum, and (d) wood chips.



Locks and dams on the Columbia and Snake River system from Portland, Oregon, to Lewiston, Idaho

Grain

The Columbia River is the nation's largest wheat export gateway. Around 40 percent of all U.S. wheat exports are shipped on the Columbia River by barge from 11 states. About 6 million metric tons travel down stream by barge from 27 upriver elevators from Lewiston to The Dalles. An additional 14 metric tons of grain are exported through six Lower Columbia River elevators.



Columbia River exports from the northwestern states constitute about 40 percent of total U.S. production (Illustration by Port of Portland).



Grain barge traveling down the Upper Columbia River (photograph by Tidewater Barge Lines).

Containers on barge

Each year, more than 46,000 containers are exported from Portland. About 10,000 of these containers arrive by barge from Lewiston. The additional containers carrying export cargo are trucked to Columbia River ports and put on barges for transport to Portland. The principal cargos are peas, beans, lentils, animal feed, and wood pulp.



Containers on barge pass through the Columbia and Snake Rivers system from 43 of the lower 48 states (photograph by Port of Portland).



Containers on barge locking past McNary lock and dam (photograph by Tidewater Barge Lines).

Petroleum

More than 3.5 million metric tons of petroleum products travel up the Columbia and Snake rivers annually.



Petroleum barge on the Upper Columbia River (photograph by Tidewater Barge Lines).

Wood chips

Lumber mills located along the Snake and Upper Columbia River barge in wood chips for processing into finished paperboard products which are then barged downstream to Portland for shipment to Asian and other markets.



Wood chip processing mill, Port of Wilma, Washington (photograph by Port of Wilma).

Remodeled Barge to Transport Biofuels on Columbia River ^{*} by Pratik Joshi

A newly remodeled barge moved the first shipment of ethanol from Pacific Ethanol's new plant in Boardman, Oregon, during the week of September 24, 2007.

The double-hulled barge, *New Vision*, is equipped to safely transport biofuels and petroleum products on the Columbia River, said Dennis McVicker, President and CEO of Tidewater Barge Lines, Inc., Vancouver, Washington, the largest inland marine transport company in the Pacific Northwest.

New Vision's inner steel tanks are surrounded by an outer steel shell with a gap of 30 to 36 inches in between to prevent any accidental spillage of fuels, he said.

The 26,000-barrel-capacity barge will help develop the region's emerging biofuel industry by

connecting sellers and buyers separated by long distances, McVicker said.



Tidewater Barge Lines' barge New Vision, recently remodeled for transporting ethanol on the Columbia River (photograph by Tidewater Barge Lines).

Tidewater, which has been in business since 1932, also installed two new engines in the tug, the *Chief*, that will push *New Vision* and also help reduce fuel consumption and emissions.

"*New Vision*, originally used to carry grains and petroleum, recently received a \$3 million upgrade to meet Federal requirements, which mandate double-hulled vessels for petroleum transportation by 2015," McVicker said.

The new barge was christened September 21, on the Columbia River in Vancouver, Washington.

"Tidewater is among the industry leaders," said Glenn Vanselow, Executive Director of Pacific Northwest Waterways Association. "They have an extremely safe record for navigation on the river," he added.

"And, by upgrading the equipment, the company will make river transportation more efficient, cost effective, and environmentally friendly," Vanselow said. "It'll be able to move a lot of fuel to inland locations, including the Tri-Cities, reducing reliance on trucks, which add to

fuel consumption, road congestion and emissions,” he said. “That makes sense in view of the rising gas prices,” he added.



Glenn Vanselow, Executive Director, Pacific Northwest Waterways Association, Portland, Oregon.

Tidewater has a hub in Pasco, Washington, which distributes ship petroleum, liquid fertilizer, and agricultural chemicals via the company's barges.

“Tidewater's new 4,300-hp engines typically will push about four barges at a time, which translates to about 480 truckloads,” McVicker said. “The engines are quieter and consume less fuel than older engines,” he said, adding that fuel efficiency means reduced emissions of nitrogen oxide by 50 percent, carbon monoxide by 80 percent, and particulate matter by 85 percent.

McVicker said barge remains the most efficient mode of transport compared with railcars and trucks in load capacities, fuel consumption, and emissions.

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Pratik Joshi is a business writer at the Tri-City, Herald. He has a master's degree in journalism from the University of Minnesota.

Ports Look Forward to Partnering With DHS on TWIC

Implementation Roll-Out *by Aaron Ellis*

During the American Association of Port Authorities' (AAPA) annual convention in Norfolk, Virginia, on October 3, 2007, United States port authority executives learned that the Department of Homeland Security (DHS) will begin enrolling port workers in its Transportation Worker Identification Credential (TWIC) program on October 16, at the Port of Wilmington, Delaware, and continue enrollments at 11 more ports in November, with the goal of enrolling all U.S. port workers by September 25, 2008.

Kurt Nagle, AAPA's president and chief executive officer, said the port industry looks forward to working with DHS on the TWIC roll-out process. “TWIC is the next step for personnel security at America's ports, and we are partnering with DHS to ensure the program is implemented in a way that enables freight movements to continue to move efficiently.”



Kurt Nagel, President and CEO, American Association of Port Authorities.

The TWIC program, which includes longshoremen, truckers, and other workers, is meant to ensure that any individual who has unescorted access to secure areas of port facilities and vessels has received a thorough federal background check and is not a security threat. The TWIC program will include criminal background, immigrant status, and terrorist watch list screening.

The enrollment schedule was one of a number of details about the program announced by DHS. Other developments include the publication of an

updated enrollment location port list (available at http://aapa.files.cms-plus.com/PDFs/twic_fixed_enrollment_sites.pdf), and a revised final rule that lowered the credential fee to \$132.50.

Workers at the Port of Wilmington will be able to pre-enroll for TWIC starting October 9. A link to the pre-enrollment website will be available on the TSA website (www.tsa.gov). Pre-enrolling online speeds up the process by allowing workers to provide biographic information and schedule a time to complete the application process in person. This eliminates waiting at enrollment centers and reduces the time it takes to enroll each individual.

Along with the start date for enrollment at the Port of Wilmington, TSA and the Coast Guard also announced the next 11 ports that will begin enrolling in November. They are: (a) early November (Corpus Christi, Texas); (b) mid-November (Baton Rouge, Louisiana; Beaumont, Texas; Honolulu, Hawaii; Oakland, California; and Tacoma, Washington); and (c) late November (Chicago/Calumet, Illinois; Houston, Texas; Port Arthur, Texas; Providence, Rhode Island; and Savannah, Georgia).

The order of ports is based on a variety of factors including risk, geographic location, size, and contractor resources. Specific dates for these ports will be released by DHS later this month along with information on other major ports.

More information on the TWIC program is available on TSA's Web site at <http://www.tsa.gov>, and more information on port security is available at the Coast Guard's Homeport site, <http://homeport.uscg.mil>, by clicking on the Maritime Security link.

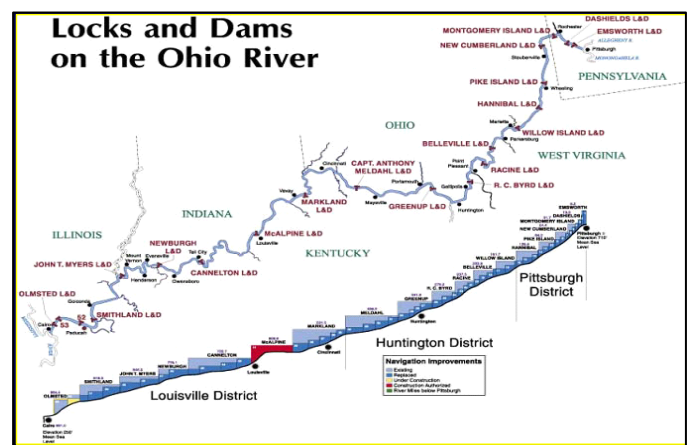


Aaron Ellis, Communications Director, American Association of Port Authorities.

Ohio River Mainstem System Study (ORMSS) by Mark Hammond

The Ohio River Mainstem System Study (ORMSS) is being conducted by the Great Lakes and Ohio River Division (LRD) of the U.S. Army Corps of Engineers through the Corps Planning Center of Expertise for Inland Navigation. The primary purpose of ORMSS is to develop an investment roadmap for the navigation system on the Ohio River mainstem for a 50-year period. The Ohio River System Investment Plan (SIP) is that roadmap. The focus is on system reliability and environmental sustainability. The SIP is compliant with the National Environmental Protection Act (NEPA) and produced a system-wide Programmatic Environmental Impact Statement (PEIS) and a Cumulative Effects Assessment (CEA) regarding collective effects on the river environment over time.

The objective of ORMSS is to develop the best plan for maintaining a viable navigation system on the Ohio River, through increasingly aggressive maintenance, rehabilitation, extension and replacement alternatives.



Ohio River mainstem is 981 miles long from Pittsburgh, Pennsylvania, to Cairo, Illinois, with year-round lock operations and significant intra-system traffic. Coal and stone (aggregates) constitute 75 percent of traffic, with rail being a major competitive routing.

Ohio River lock configurations

The three upper Ohio River projects each have small 600 ft × 110 ft main chambers, and smaller 360 ft × 56 ft auxiliary chambers.



Emsworth Locks and Dam, an example of the three upper Ohio River projects (the other two are Dashields and Montgomery).

The middle and lower Ohio River projects have two lock chambers, a main lock which is 1,200 ft × 110 ft, and an auxiliary chamber which is 600 ft × 110 ft.



Markland Locks and Dam, an example of middle and lower Ohio River projects.

After construction of the currently authorized projects, the Ohio River mainstem will have twin

1,200-ft-long projects at Olmsted, McAlpine, Myers, and Greenup, in addition to the existing Smithland Locks.

Importance of Ohio River navigation

Ohio River navigation has significant commercial importance for the mining, energy, construction, and manufacturing sectors. The primary commodity (55-60 percent) moved on the river is utility steam coal for 34 coal fired plants on the Ohio River mainstem. Vast coal reserves exist in the basin, and the primary end use is at coal fired electric generating plants. Over 250 million tons of commercial traffic moved on the Ohio River in 2005. The traffic is valued at over \$28 billion dollars and moved at about \$1.9 billion in transportation cost savings.

Investment needs are driven by delays associated with maintenance of the 1,200 ft locks forcing traffic to use the 600 ft locks on the middle and lower Ohio River, and maintenance of the 600 ft locks forcing traffic to use the 360 ft locks on the upper Ohio River. The fundamental problem along the Ohio River is aging infrastructure and insufficient auxiliary lock capacity.

Example lock closure costs

The main chamber of Greenup was dewatered for inspection and repair work on September 8, 2003 for an expected 3-week closure. However, due to severe damage to the downstream miter gates, the chamber was not watered back up until November 1, 7 weeks later.

The unexpected additional 4-week closure resulted in a total closure time of 52 days. Tow delays averaged more than 38 hr per tow, and cost industry in excess of \$ 13 million in delay costs alone (\$9 million more than the scheduled 3-week closure). In addition to delay costs, industry also experienced higher costs from alternative sourcing and transportation mode changes necessary to continue shipment and receipt of products.



Greenup Locks and Dam

The deteriorated condition of the Greenup Locks has resulted in more frequent and longer duration planned closures to inspect and patch serious condition problems associated with the miter gates until such time that the authorized improvements at Greenup be fully funded and implemented.

Ohio River Navigation Investment Model (ORNIM)

LRD contracted with the Oak Ridge National Laboratories (ORNL) to develop a system model before the National Academies of Science (NAS) critique of the Upper Mississippi River study. The Ohio River Navigation Investment Model (ORNIM) is a powerful, state-of-the-art waterway transportation system investment model. Critical inputs into the modeling include: (a) investment plans (maintenance regimes, major rehabilitations, new construction, and their associated costs); (b) structural reliability; (c) lock capacities; (d) traffic demands; and (e) transportation rates and tow operating costs. ORNIM integrates the engineering and economics to identify an optimum plan for a given level of traffic demand with an unconstrained budget. It is planned that ORNIM will be used to determine the optimum plan under budget constrained conditions.

The state-of-the-art lock congestion simulation model used to develop tonnage-transit curves for ORNIM is one preferred by NAS and is based on the behavior of locks found in Lock Performance Monitoring System (LPMS) data. Transportation rates were determined by Tennessee Valley Authority transportation experts using recommended techniques. ORMSS applied the latest risk engineering reliability analysis in projecting structural conditions under alternative maintenance regimes. The risk of failure and the consequences of failure are expressed in probabilistic terms. The likelihood of failure is represented by a hazard function. In the event of a failure, an event tree represents the degree of failure and nature of failure to include type and cost of fix required.

Traffic demand projections rest on the forecast of electricity generation and the consumption of coal and natural gas used to produce electricity. Five different traffic demand forecast scenarios were developed to reflect uncertainty. Three were based on different environmental regulation assumptions and two were based on different economic growth forecasts.

A wide range of non-structural alternatives were evaluated, including mooring cells to reduce approach time, helper boats to reduce lockage time, and informal scheduling to reduce congestion. The effects of industry behavior to ship around lock closures are incorporated in the modeling process.

Without Project Condition (WOPC)

The WOPC was formulated to develop the least Federal cost plan to provide viable navigation on the Ohio River mainstem. It was assumed the minimum level of system reliability would be maintained. Furthermore, it was considered that authorized improvements either under construction or pending appropriation would be completed. The Ohio River Mainstem Ecosystem Restoration Program also would be implemented. The focus is on the mainstem locks, not the dams. The system was simulated for over 50 years of traffic demand to

determine benefits and costs of a base-case reactive maintenance plan. More efficient operational measures like n-up and n-down lockages are included during closures.

WOPC costs are the total Federal costs to operate the Ohio River in a reactive maintenance strategy. Ohio River benefits are measured as equilibrium waterway transportation savings net of any transportation delay costs from unscheduled closures. Investment in scheduled lock improvements buys down risk associated with scheduled lock maintenance and unscheduled lock repair. Scheduled dam maintenance, normal operation and maintenance, and random minor costs are the same between the WOPC and the With Project Condition (WPC).

With Project Condition (WPC)

The WPC was formulated using a stepwise approach optimizing increasingly more aggressive maintenance alternatives, including structural modifications, at each of the mainstem projects. The base-case condition is simple reactive maintenance. The second level of alternatives considered that some component replacements would be put into effect, plus reactive maintenance elsewhere. The third level of alternatives would be extensive rehabilitation of certain project features, plus some component replacements, plus reactive maintenance elsewhere. The fourth and final level of alternatives would be entire structure replacement, plus rehabilitation of certain other project features, plus some component replacements, plus reactive maintenance elsewhere.

Findings to date

Incremental benefits (\$148-\$260 million) are transportation cost reductions attributable to the increased capacity from the structural improvements (new chambers and main chamber reliability). Incremental costs (\$18-\$22 million) are the additional costs for Emsworth, Dashiields, and Montgomery lock replacements, and lower Ohio main chamber rehabilitations and component

replacements. Incremental net benefits range between \$129-\$238 million.

Conclusions

The ORMSS applied a state-of-the-art system model ORNIM. An independent technical review of the economics data and models was performed by outside Corps experts. The following conclusions were reached after 50 year simulations of traffic demand:

- All traffic scenarios indicate future growth.
- Mainstem locks will degrade without proactive maintenance.
- Proactive maintenance is robustly justified.
- Replacement of very old upper Ohio River locks is justified.
- Need to complete the upper Ohio River study.
- In general, resources are sustainable with the exception of mussels and riparian/floodplain resources.
- Opportunities exist to improve ecosystem sustainability for the Ohio River.
- The SIP is not budget constrained. There is a need to develop a budget constrained and comprehensive Inland Navigation System SIP.

The mainstream locks of the Ohio River will degrade without proactive maintenance. Traffic disruptions will accelerate and economic consequences will likely be severe. Implementation of navigation investments in the WPC will have beneficial long term environmental impacts compared to the WOPC. To improve ecological sustainability, additional measures are needed (e.g., protect and restore habitats and native species, improve connectivity among habitats, and eliminate stressors).



Mark Hammond is an Economist with the U.S. Army Corps of Engineers, Huntington District. His office is part of the Corps' National Planning Center of Expertise for Inland Navigation (PCXIN).

Taking Stock of Locks: Army Corps Shows off Progress of River-traffic Improvements* *by Eric Scott Campbell*

With a worldwide conference of marine-navigation experts in Louisville, Kentucky, during the week of September 16, David Klintstiver had an audience to show his decade-long project that is approaching its final year.



Dave Klintstiver, resident engineer at the McAlpine Locks and Dam, discusses the different aspects of construction currently underway at the facility September 18, during a guided tour. The facility, located across the river from New Albany, Indiana, is expected to be finished in March 2009 (staff photograph by Kevin McGloshen).

Since 2000, the U.S. Army Corps of Engineers has been renovating the McAlpine Locks and Dam to allow river traffic to pass more swiftly. The completion deadline for the \$430 million project is March 2009, and a tour reveals signs that progress

has been made — and that it can not continue fast enough.

The main 1,200-ft-long lock is a gated chamber in which the water depth can be adjusted between upstream and downstream, allowing a convoy of 15 connected barges to enter from one side and emerge from the other 45 minutes later.

Locks have conducted river traffic since the early 1800s, when the sudden drop and rapids of the Falls of the Ohio were found to be impassable. The 1,200-ft lock sits alongside a 360-ft lock and 600-ft lock built previously.

In 1990, a study recommended demolishing the two shorter locks to allow construction of a second 1,200-ft chamber, which can fit an entire barge convoy that would take several hours to pass, separated, through a shorter lock. Klintstiver, the project's resident engineer, said 18 to 20 of those 15-barge convoys pass through McAlpine on a typical day.



Aerial view of McAlpine Locks and Dam construction site where two smaller locks are being replaced by a second 1,200-ft-long lock.

Two dozen representatives from the Smart Rivers 2007 Conference toured the construction site Wednesday morning (September 18) — where a second 1,200-ft-long chamber is replacing the two shorter ones — as Army Corps officials touted river traffic as a cheaper, energy-efficient alternative to

trucking. They noted that coal is the most frequent passenger of Ohio River barges.

Half of the \$430 million price tag is to be reimbursed by the marine shipping industry, Klinstiver said.

The downside of removing the two shorter locks, Corps official Mike Ryan said, is that any malfunction of the lone operating lock shuts down river traffic. Two weeks of repairs in August 2004 cost the industry \$9 million, a Corps report said.



The new lock chamber at McAlpine will be 1,200 ft in length. When the facility is up-to-date, there will be two 1,200-ft lock chambers (staff photograph by Kevin McGloshen).

The current lock's downstream gates, framed in wood, had sprouted two leaks where they joined Wednesday morning. Once the new lock operates, the old gates will eventually be discarded in favor of prefabricated ones currently sitting on site.

"We keep our fingers crossed that they'll last until we have water coming through this new lock," Klinstiver said.

* This article was originally published by *The (New Albany, Indiana) Tribune* on September 21, 2007, and is reproduced here by permission. *The Tribune* web site is located at www.newsandtribune.com.



Eric Scott Campbell has reported on local affairs in Indiana's Clark and Floyd counties since January 2006. The Pennsylvania native previously worked for The Asbury Park (New Jersey) Press and The (Cherry Hill, New Jersey) Courier-Post. Campbell and his fiancée, Holly, live in Louisville, Kentucky.

LaGrange Cites Port of New Orleans Successes in Annual Address: NOCS Relocation, Container Traffic Increases Lauded

by Matt Gresham, Public Information Officer, Port of New Orleans, Louisiana

A new facility for a long-term Port of New Orleans, Louisiana, tenant, recruitment of an operator for niche shipping from the Port's Inner Harbor, and better than 50 percent gains in container traffic highlighted Port President and CEO Gary LaGrange's annual State of the Port Address on 19 September 2007 at the Plimsoll Club atop the World Trade Center in New Orleans.

One year ago, LaGrange placed the relocation of New Orleans Cold Storage (NOCS) to the Mississippi River as his top priority. In June, Port officials secured \$30.5 million in capital outlay money to renovate the Governor Nicholls Street Wharf to become the new home of NOCS.

"We searched for a location for this facility throughout the Port and found Governor Nicholls was the economically feasible solution," LaGrange said. "This is a site where a longstanding Port tenant can grow its business for many years to come."



Gary LaGrange, President and CEO, Port of New Orleans, Louisiana.

NOCS found itself forced to look for a location on the Mississippi River after silting and the impending closure of the Mississippi River-Gulf Outlet effectively cut off deep-draft access to its dockside cold-storage facility. In 2005, NOCS generated 718 direct and indirect jobs, and had a \$35 million economic impact on the local economy. NOCS officials hope to double its cargo at the new facility on the Mississippi River.

The recovery and growth of the Port's container traffic also topped the Port's agenda, and LaGrange pointed to strong current cargo figures and plans for expansion.

"During the first half of 2007, we've seen exceptional growth in container cargo - overall up 54 percent compared to last year," LaGrange said. "Mediterranean Shipping Company, Hapag-Lloyd, Seaboard Marine, and Maersk are all growing their container cargo through the Port of New Orleans."

In August, Seaboard Marine announced plans to enter into a long-term lease with the Port to operate the Port's France Road Container Terminal, which had been shuttered since Hurricane Katrina. The Miami-based shipper currently operates a twice-weekly service with three ships in New Orleans.

"We hope Seaboard can grow that business and possibly double their services between New Orleans and Latin America," LaGrange said.



Breakbulk and container ships working at the Port of New Orleans Nashville Avenue Complex (foreground), and the Napoleon Avenue Container Terminal (background). (Photograph by Donn Young, Port of New Orleans).

The Port's cruise and tourism sector also realized remarkable milestones throughout the past year, highlighted by the opening of the Port's \$37 million Erato Street Cruise Terminal and Parking Garage in October. This state-of-the-art cruise terminal has garnered national and international awards for its design and passenger amenities. LaGrange said Port officials are also in the design phase for a new cruise terminal at the Poland Avenue Wharf, which could be completed by 2009.

Carnival Cruise Line officials also signed an extension this summer to keep the world's largest cruise line sailing from New Orleans through at least 2010.

"Carnival officials cited increased demand for their New Orleans product when they made the announcement," LaGrange said. "We are continuing to work with Carnival to return the company's year-round 7-day cruises to New Orleans, as well. And, the Port is pleased to report Norwegian Cruise Line will home-port a new, larger balcony ship - the *Norwegian Spirit* - next month."



Carnival Cruise Line's Fantasy docked at the Port of New Orleans' new \$37 million Erato Street Cruise Terminal and Parking Garage. The ship sails year-round from the Port to western Caribbean destinations (photograph by Donn Young, Port of New Orleans).

LaGrange said preliminary figures indicate the 2007 cruise season bounced back to well over 50 percent of pre-Katrina levels, as about 500,000 passengers will embark or disembark from New Orleans. In 2004, the Port had 740,000 passengers, the last full year unaffected by the storm.

"This is all good news for the Port and our city's tourism industry," LaGrange said.

Another project underway is the riverfront development plan, initiated when the City of New Orleans and Port officials signed an agreement in the spring of 2006 to streamline the permitting process for riverfront projects.

"As a result of our agreement, a comprehensive plan called 'Reinventing the Crescent' will be unveiled in the coming months," LaGrange said. "World-renowned architects partnered with local firms to create a new vision for our city's picturesque riverfront, mixing public parks and commercial projects, which could result in \$3 billion of private investment."

While much of the LaGrange's address focused the great strides made in the past year, he also challenged Louisiana to invest in the state's maritime infrastructure.

LaGrange cited a soon-to-be released study conducted by GNO Inc., which repeatedly placed the region's "extensive port system" as its most valuable asset.

"Sadly, the planners and economists contributing to this report say a major problem is under-funding and under-utilizing that same port system," LaGrange said. "With 160,000 jobs in Louisiana alone, and 380,000 nationally, depending on commerce at the Port of New Orleans, our leaders must realize the time is now to invest with a vision toward the future. Our leaders must realize Louisiana's economy and New Orleans' recovery emanates from the Port."

AAPA Installs O'Hollaren as Board Chairman for 2007-2008 *by Aaron Ellis, Communications Director, American Association of Port Authorities*

Port of Longview, Washington, Executive Director Kenneth B. O'Hollaren was formally installed on October 4, 2007, as the American Association of Port Authorities' (AAPA) Chairman of the Board for 2007-2008. Mr. O'Hollaren accepted his new chairmanship duties at a membership meeting in Norfolk, Virginia, during which the entire slate of 2007-2008 officers were inducted as part of AAPA's 96th Annual Convention activities.

(www.vaports.com/AAPAwebsite/aapa_main.html).



Kenneth B. O'Hollaren, Executive Director, Port of Longview, Washington, and newly installed AAPA Chairman of the Board.

"Ken O'Hollaren is well respected by his colleagues, having been elected chairman through a unanimous vote of AAPA's board of directors, representing port officials throughout the Western Hemisphere," said AAPA President and CEO Kurt

Nagle. "He has the experience, leadership skills and dedication to advance our Association's mission of connecting port communities with the global marketplace, and we look forward to his chairmanship for the coming year."

Mr. O'Hollaren has served as the Longview port's executive director since January 1988. He joined the port in 1980 as assistant operations manager, later becoming the assistant to the executive director. Prior to joining the port, he worked in Portland, Oregon, as operations manager for Overseas Shipping Company and Evergreen Line.

Mr. O'Hollaren, who earned a bachelor's degree from the University of Oregon in Political Science and Latin American Studies, and an MBA from the University of Portland, is presently chairman of the Interstate Columbia River Improvement Project, a bi-state coalition of ports organized to deepen the Columbia River navigation channel. In addition to AAPA, he serves on the board of the Cowlitz Economic Development Council, Cowlitz County, Washington.

In his role as board chairman, Mr. O'Hollaren will also serve as AAPA's U.S. Delegation chairman for 2007-2008. Other U.S. Delegation officers include Port of Los Angeles Executive Director Geraldine Knatz, PhD, chairwoman-elect; and Michael L. Leone, Port Director for the Massachusetts Port Authority, vice-chairman.

Mark Your Calendar: Solutions to Coastal Disasters 2008 Conference



The American Society of Civil Engineers' Coasts, Oceans, Ports and Rivers Institute (COPRI) will hold the next **Solutions to Coastal Disasters**

2008 Conference from April 13-16, 2008, at Turtle Bay Resort on Oahu, Hawaii. The conference program will follow the format used during past conferences in San Diego, California, (2002) and Charleston, South Carolina (2005).

Solutions to Coastal Disasters 2008 Conference will build upon the information and discussions that developed from earlier conferences, and focus on both the lessons learned and the opportunities to best apply these lessons, to avoid or minimize preventable losses. The conference will provide opportunities for multi-disciplinary presentations, including lessons learned from the Indian Ocean tsunami, Hurricane Katrina, and concerns and opportunities developing from the fourth and most recent report of the Inter-governmental Panel on Climate Change. Recent disasters have revealed the vulnerabilities of coastal ecosystems and coastal communities, the interdependent nature of coastal systems, and the intense and conflicting pressures that define human use of dynamic coastal environments. **Solutions to Coastal Disasters 2008 Conference** will encourage greater examination of the ecosystem dynamics, vulnerability, and ways to incorporate social and ecological solutions into the discussion of coastal disasters.

Additional information about the conference, and on sponsorship and exhibit opportunities, can be found on the web site:

<http://content.asce.org/conferences/cd2008/>.

Welcome New PIANC Members!

PIANC USA would like to introduce and welcome some of our newest members. They have now joined PIANC's world-wide network of professionals in the field of inland and maritime navigation and ports.

Individual members

Helen Brohl, U.S. Committee on the Marine Transportation System

Dennis Hill, Rookwood Terminals, Fulton Railroad

Javier Itriago, HPA, Inc.

William McAnally, Mississippi State University

Cory Rogers, CDM

Abbas Sarmed, DMJM Harris

Laura Shabe, DMJM Harris

Ayinde Taiwo, Hilex Communication

Thomas Wakeman III, Earth Doctors

Wesley Wilson, University of Oregon

Small corporate member

Michael A. Jordan, Liftech Consultants Inc.

David Weekly, Planning Center of Expertise for Inland Navigation, USACE

Please continue to encourage your friends and colleagues to join PIANC USA so they can start to receive all the benefits that PIANC has to offer! Refer them to www.pianc.us for a membership application.

PIANC USA Member Benefits

As a reminder, your PIANC USA membership entitles you to receive many outstanding benefits. We hope you are taking advantage of all of the following:

- **Quarterly Technical Magazine, *On Course***, with technical articles and news from the navigation community.
- **Technical Reports** in the field of inland maritime and recreational navigation, including environmental issues.
- Quarterly electronic **PIANC USA Newsletter, *Bulletin***, with news and articles related to navigation and PIANC news in the United States.
- **PIANC International Electronic Newsletter, *Sailing Ahead***, with international news updates for the navigation community.

- Complimentary or reduced registrations to **Conferences** such as the PIANC Annual General Assembly and World Congress, PIANC USA Annual Meeting, Ports Conference, SMART RIVERS, PIANC USA-COPEDEC Conference on Coastal and Port Engineering in countries in transition, etc.
- **PIANC Membership Directory**, an international network of like-minded professionals.
- Opportunity to develop “cutting edge” advancements in your profession by serving on **Technical International Working Groups**.
- **Networking Events** to strengthen your professional connections and business opportunities worldwide.
- **Professional Recognition** with awards such as the De Paepe-Willems Award, Jack Nichol Marina Design Award, and the PIANC USA Scholarship.
- **Young Professional** activities for students and professionals under age 40.

Upcoming Related Conferences

2007

- **National Waterways Conference Annual Meeting.** November 7-9, Mobile, Alabama.
- **CEDA Dredging Days.** November 7-9, Rotterdam, The Netherlands.
- **Dredging in South America.** December 9-12, Rio de Janeiro, Brazil.

2008

- **37th Dredging Engineering Short Course.** January 7-11, Texas A&M University, College Station, Texas.
- **Green Port/ECO Ports.** February 27-28, Amsterdam, The Netherlands.
- **Inland Waterways Navigation Conference.** March 3-7, St. Louis Missouri.

- [Solutions to Coastal Disasters 2008 Conference.](#) April 13-16, Turtle Bay Resort, Oahu, Hawaii.
- [Coastal Zone Canada.](#) May 25-29, Vancouver, British Columbia, Canada.
- [Western Dredging Association \(WEDA\) XXVIII, and Texas A&M University 39th Annual Dredging Seminar.](#) June 8-11, St. Louis, Missouri.
- [31st International Conference on Coastal Engineering.](#) August 31 - September 5, Hamburg, Germany.
- [World Canals Conference 2008.](#) September 15-17, Kingston, Ontario, Canada.
- [Gulf Coast Hurricane Preparedness, Response, Recovery and Rebuilding.](#) Early November, Mobile, Alabama.

PIANC USA Dues

2007 Dues

As decided at the Annual General Assembly in May 2006, PIANC International raised membership dues in 2007. Since we have to pay our dues to PIANC International in Euros, the conversion from U.S. dollars adds an additional cost on top of the new rates for PIANC membership. As a result, the U.S. Commission voted to increase dues for PIANC USA members effective January 1, 2007. The new PIANC USA membership fees are as follows:

- Individual member: \$120
- Student member: \$40
- Small corporate member: \$600
- Large corporate member: \$1,150

Adjusting the PIANC USA dues enables us to continue to meet our international commitment as well as to expand and re-energize our current programs and fund new initiatives. At PIANC USA, we are dedicated to being good stewards of our resources and we stretch every penny to make sure that your investment in our organization is being put to the best use. We thank you for your

continued membership and support, and we look forward to working with you in 2007.

About PIANC

What is PIANC? The International Navigation Association (PIANC) is a worldwide organization of individuals, corporations, and national governments. Founded in 1885 in Brussels, Belgium, it is concerned with maritime ports and inland waterways. The Association promotes contact and advances and disseminates information of a technical, economic, and environmental nature between people worldwide in order to efficiently manage, develop, sustain, and enhance inland, coastal and ocean waterways, ports and harbors, and their infrastructure, in a changing environment.

Where is PIANC? The international headquarters is located in Brussels, Belgium, at facilities provided by the Belgian Government. The headquarters of the United States Section is located in the Washington, DC area, within facilities provided by the U.S. Army Corps of Engineers.

International Interaction. The Annual General Assembly operates through a Council, which directs the working level permanent technical committees, international study commissions, and working groups.

Working Groups. Technical working groups are composed of participants from member countries who have interest in various subjects being studied. The groups gather, analyze, and consolidate state-of-the-art material from each country. The resulting reports are published and sent to each PIANC member. Working group reports and the International Bulletin are sent to each member from Brussels.

Every 4 years an International Congress, open to all members and other registrants, is held for the presentation and discussion of papers on subjects pertaining to waterways and maritime navigation.

PIANC also participates in technical activities with other organizations to study navigation problems and joins with them to present symposia on related subjects.

In the USA. The United States became a member of PIANC by Act of Congress in 1902. The Chairman of PIANC USA is the Assistant Secretary of the Army (Civil Works). The Director of Civil Works for the U.S. Army Corps of Engineers serves as President. A National Commission of 11 individuals, which represent both private industry and the Federal Government, manages PIANC USA. PIANC USA has two standing and four technical committees, which promote the flow of information between members and facilitate cooperation with other national organizations. The committees are Membership, Publications, Environment, Inland Navigation, Maritime Navigation, and Ports and Recreation Navigation.

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